

### ANALYTICAL REPORT

Lab Number: L1314744

Client: Environmental Health & Engineering Inc.

117 Fourth Ave

Needham, MA 02494

ATTN: Tuan Truong
Phone: (781) 247-4300
Project Name: Not Specified

Project Number: 18536 Report Date: 08/07/13

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Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806 508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com



**Project Name:** Lab Number: Not Specified L1314744

**Project Number:** Report Date: 08/07/13 18536

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1314744-01	146136	Not Specified	08/01/13 00:00
L1314744-02	146137	Not Specified	08/01/13 00:00
L1314744-03	146138	Not Specified	08/01/13 00:00
L1314744-04	146143	Not Specified	08/01/13 00:00



Project Name:Not SpecifiedLab Number:L1314744Project Number:18536Report Date:08/07/13

#### **Case Narrative**

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.



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**Case Narrative (continued)** 

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Galte Por Elizabeth Porta

Authorized Signature:

Title: Technical Director/Representative

Date: 08/07/13

## **ORGANICS**



## **PCBS**



Project Name: Not Specified Lab Number: L1314744

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**SAMPLE RESULTS** 

Lab ID: Date Collected: 08/01/13 00:00

Client ID:146136Date Received:08/01/13Sample Location:Not SpecifiedField Prep:Not SpecifiedMatrix:Air MediaExtraction Method:EPA 3540C

Analytical Method: 105,8270D-SIM/NOAA-M Extraction Date: 08/05/13 12:25

Analytical Date: 08/06/13 13:07

Analyst: CM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol)	- Mansfield Lab					
Managhlarahighagula	ND			40.0		4
Monochlorobiphenyls	ND		ng/cart	10.0		1
Dichlorobiphenyls	10.2		ng/cart	10.0		1
Trichlorobiphenyls	54.2		ng/cart	10.0		1
Tetrachlorobiphenyls	55.5		ng/cart	10.0		1
Pentachlorobiphenyls	94.8		ng/cart	10.0		1
Hexachlorobiphenyls	89.5		ng/cart	10.0		1
Heptachlorobiphenyls	28.5		ng/cart	10.0		1
Octachlorobiphenyls	ND		ng/cart	10.0		1
Nonachlorobiphenyls	ND		ng/cart	10.0		1
Decachlorobiphenyl	ND		ng/cart	10.0		1
Total Homologs	333		ng/cart	10.0		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	104		50-125
CI8-BZ#202-C13	112		50-125



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**SAMPLE RESULTS** 

Lab ID: L1314744-02 Date Collected: 08/01/13 00:00

Client ID: 146137 Date Received: 08/01/13 Not Specified Sample Location: Field Prep: Not Specified EPA 3540C Matrix: **Extraction Method:** Air Media 08/05/13 12:25 **Extraction Date:** 

Analytical Method: 105,8270D-SIM/NOAA-M

Analytical Date: 08/06/13 14:03

Analyst: CM

Parameter	Result	Qualifier	Units	RL	MDL	<b>Dilution Factor</b>
PCB Homologs by GC/MS-SIM (Lo	owVol) - Mansfield Lab					
Monochlorobiphenyls	ND		ng/cart	10.0		1
Dichlorobiphenyls	10.6		ng/cart	10.0		1
Trichlorobiphenyls	56.7		ng/cart	10.0		 1
Tetrachlorobiphenyls	60.2		ng/cart	10.0		1
Pentachlorobiphenyls	97.4		ng/cart	10.0		1
Hexachlorobiphenyls	75.2		ng/cart	10.0		1
Heptachlorobiphenyls	24.8		ng/cart	10.0		1
Octachlorobiphenyls	ND		ng/cart	10.0		1
Nonachlorobiphenyls	ND		ng/cart	10.0		1
Decachlorobiphenyl	ND		ng/cart	10.0		1
Total Homologs	325		ng/cart	10.0		1

	Acceptance						
Surrogate	% Recovery	Qualifier	Criteria				
Cl3-BZ#19-C13	104		50-125				
CI8-BZ#202-C13	109		50-125				



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**SAMPLE RESULTS** 

Lab ID: L1314744-03 Date Collected: 08/01/13 00:00

Client ID: 146138 Date Received: 08/01/13 Not Specified Sample Location: Field Prep: Not Specified EPA 3540C Matrix: **Extraction Method:** Air Media 08/05/13 12:25 **Extraction Date:** 

Analytical Method: 105,8270D-SIM/NOAA-M

Analytical Date: 08/06/13 14:59

Analyst: CM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (Low	Vol) - Mansfield Lab					
Monochlorobiphenyls	ND		ng/cart	10.0		1
Dichlorobiphenyls	ND		ng/cart	10.0		1
Trichlorobiphenyls	46.0		ng/cart	10.0		1
Tetrachlorobiphenyls	42.0		ng/cart	10.0		1
Pentachlorobiphenyls	65.7		ng/cart	10.0		1
Hexachlorobiphenyls	52.4		ng/cart	10.0		1
Heptachlorobiphenyls	14.8		ng/cart	10.0		1
Octachlorobiphenyls	ND		ng/cart	10.0		1
Nonachlorobiphenyls	ND		ng/cart	10.0		1
Decachlorobiphenyl	ND		ng/cart	10.0		1
Total Homologs	230		ng/cart	10.0		1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Cl3-BZ#19-C13	105		50-125	
CI8-BZ#202-C13	109		50-125	



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**SAMPLE RESULTS** 

Lab ID: L1314744-04 Date Collected: 08/01/13 00:00

Client ID: 146143 Date Received: 08/01/13
Sample Location: Not Specified Field Prep: Not Specified
Matrix: Air Media Extraction Method: EPA 3540C

Analytical Method: 105,8270D-SIM/NOAA-M Extraction Date: 08/05/13 12:25

Analytical Date: 08/06/13 15:55

Analyst: CM

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (Low	vVol) - Mansfield Lab					
Monachlarabinhanyla	ND		ng/oort	10.0		1
Monochlorobiphenyls			ng/cart			·
Dichlorobiphenyls	ND		ng/cart	10.0		1
Trichlorobiphenyls	ND		ng/cart	10.0		1
Tetrachlorobiphenyls	ND		ng/cart	10.0		1
Pentachlorobiphenyls	ND		ng/cart	10.0		1
Hexachlorobiphenyls	ND		ng/cart	10.0		1
Heptachlorobiphenyls	ND		ng/cart	10.0		1
Octachlorobiphenyls	ND		ng/cart	10.0		1
Nonachlorobiphenyls	ND		ng/cart	10.0		1
Decachlorobiphenyl	ND		ng/cart	10.0		1
Total Homologs	ND		ng/cart	10.0		1

Surrogate	% Recovery	Qualifier	Acceptance Qualifier Criteria		
Cl3-BZ#19-C13	100		50-125		
CI8-BZ#202-C13	107		50-125		



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Method Blank Analysis Batch Quality Control

Analytical Method: 105,8270D-SIM/NOAA-M

Analytical Date: 08/06/13 11:14

Analyst: CM Extraction Method: EPA 3540C 08/05/13 12:25 Extraction Date:

Parameter	Result	Qualifier (	Jnits	RI	_	MDL	
PCB Homologs by GC/MS-SIM (Lo	owVol) - Mans	sfield Lab for sar	mple(s):	01-04	Batch:	WG626529-1	
Monochlorobiphenyls	ND	n	g/cart	10.	0		
Dichlorobiphenyls	ND	n	g/cart	10.	0		
Trichlorobiphenyls	ND	n	g/cart	10.	0		
Tetrachlorobiphenyls	ND	n	g/cart	10.	0		
Pentachlorobiphenyls	ND	n	g/cart	10.	0		
Hexachlorobiphenyls	ND	n	g/cart	10.	0		
Heptachlorobiphenyls	ND	n	g/cart	10.	0		
Octachlorobiphenyls	ND	n	g/cart	10.	0		
Nonachlorobiphenyls	ND	n	g/cart	10.	0		
Decachlorobiphenyl	ND	n	g/cart	10.	0		
Total Homologs	ND	n	g/cart	10.	0		

		Acceptance			
Surrogate	%Recovery	Qualifier	Criteria		
CI2 D7#40 C42	400		50.405		
Cl3-BZ#19-C13	103		50-125		
CI8-BZ#202-C13	109		50-125		



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rameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
B Homologs by GC/MS-SIM (LowVol) - M	lansfield Lab As	ssociated sa	mple(s): 01-04	Batch:	WG626529-2			
CI1-BZ#1	100		-		40-140	-		30
CL1-BZ#3	104		-		40-140	-		30
CI2-BZ#4/#10	117		-		40-140	-		30
CI2-BZ#5/#8	98		-		40-140	-		30
Cl3-BZ#19	106		-		40-140	-		30
Cl3-BZ#18	100		-		40-140	-		30
CI2-BZ#15	92		-		40-140	-		30
CI4-BZ#54	106		-		40-140	-		30
Cl3-BZ#29	93		-		40-140	-		30
CI4-BZ#50	111		-		40-140	-		30
Cl3-BZ#28/#31	96		-		40-140	-		30
Cl4-BZ#45	116		-		40-140	-		30
Cl4-BZ#52	98		-		40-140	-		30
Cl4-BZ#43/#49	112		-		40-140	-		30
CI4-Bz#47/#48	102		-		40-140	-		30
CI5-BZ#104	102		-		40-140	-		30
CI4-BZ#44	100		-		40-140	-		30
Cl3-BZ#37	83		-		40-140	-		30
CI4-BZ#74	97		-		40-140	-		30
CI6-BZ#155	108		-		40-140	-		30
CI4-BZ#70	96		-		40-140	-		30



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arameter	LCS %Recovery	Qual %	LCSD Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
CB Homologs by GC/MS-SIM (LowVol) -	Mansfield Lab Ass	sociated sample	e(s): 01-04	Batch:	WG626529-2			
Cl4-BZ#66	98		-		40-140	-		30
CI5-BZ#95	93		-		40-140	-		30
Cl4-BZ#56/#60	91		-		40-140	-		30
CI5-BZ#101/#84	109		-		40-140	-		30
CI5-BZ#99	101		-		40-140	-		30
Cl6-BZ#154	99		-		40-140	-		30
Cl5-BZ#110	91		-		40-140	-		30
Cl4-BZ#81	94		-		40-140	-		30
CI5-BZ#87	103		-		40-140	-		30
Cl6-BZ#151	97		-		40-140	-		30
Cl4-BZ#77	94		-		40-140	-		30
CI5-BZ#123	94		-		40-140	-		30
Cl6-BZ#149	100		-		40-140	-		30
CI7-BZ#188	98		-		40-140	-		30
CI5-BZ#118	96		-		40-140	-		30
Cl6-BZ#146	96		-		40-140	-		30
Cl5-BZ#114	99		-		40-140	-		30
Cl6-BZ#153	100		-		40-140	-		30
Cl6-BZ#138/#163	82		-		40-140	-		30
CI6-BZ#158	104		-		40-140	-		30
CI5-BZ#105	86		-		40-140	-		30



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arameter	LCS %Recovery	LCSD Qual %Recovery	%Recovery Qual Limits	RPD	Qual	RPD Limits
PCB Homologs by GC/MS-SIM (LowVol) - Ma	ansfield Lab As	sociated sample(s): 01-04	Batch: WG626529-2			
CI7-BZ#182/#187	98	-	40-140	-		30
CI7-BZ#183	103	-	40-140	-		30
Cl6-BZ#167/#128	98	-	40-140	-		30
CI5-BZ#126	73	-	40-140	-		30
CI7-BZ#174	106	-	40-140	-		30
Cl8-BZ#202	109	-	40-140	-		30
CI7-BZ#177	97	-	40-140	-		30
Cl6-BZ#156	95	-	40-140	-		30
Cl6-BZ#157	94	-	40-140	-		30
CI7-BZ#180	98	-	40-140	-		30
CI7-BZ#170/#190	84	-	40-140	-		30
CI8-BZ#201	105	-	40-140	-		30
Cl6-BZ#169	98	-	40-140	-		30
Cl9-BZ#208	113	-	40-140	-		30
CI7-BZ#189	104	-	40-140	-		30
CI8-BZ#195	104	-	40-140	-		30
CI8-BZ#194	104	-	40-140	-		30
CI8-BZ#205	104	-	40-140	-		30
CI9-BZ#206	106	-	40-140	-		30
Cl10-BZ#209	103	-	40-140	-		30



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	LCS		LCSD		%Recovery			
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	RPD Limits

PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab Associated sample(s): 01-04 Batch: WG626529-2

Surrogate	LCS %Recovery Qu	LCSD ual %Recovery	Qual	Acceptance Criteria
Cl3-BZ#19-C13	104			50-125
CI8-BZ#202-C13	113			50-125



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## **Sample Receipt and Container Information**

YES Were project specific reporting limits specified?

Reagent H2O Preserved Vials Frozen on: NA

**Cooler Information Custody Seal** 

Cooler

Α Absent

Container Information							
Container ID	Container Type	Cooler	рН	deg C	Pres	Seal	Analysis(*)
L1314744-01A	PUF Air Cartridge - High or Low	Α	N/A	5.6	Υ	Absent	A2-PCBHOMS-8270SIML(7)
L1314744-02A	PUF Air Cartridge - High or Low	Α	N/A	5.6	Υ	Absent	A2-PCBHOMS-8270SIML(7)
L1314744-03A	PUF Air Cartridge - High or Low	Α	N/A	5.6	Υ	Absent	A2-PCBHOMS-8270SIML(7)
L1314744-04A	PUF Air Cartridge - High or Low	Α	N/A	5.6	Υ	Absent	A2-PCBHOMS-8270SIML(7)



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#### **GLOSSARY**

#### Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes
or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

#### **Footnotes**

 The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

#### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

#### Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.
- H The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.

Report Format: Data Usability Report



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#### **Data Qualifiers**

- M Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P The RPD between the results for the two columns exceeds the method-specified criteria.
- Q The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- **R** Analytical results are from sample re-analysis.
- RE Analytical results are from sample re-extraction.
- S Analytical results are from modified screening analysis.
- J Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report



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#### REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997 in conjunction with NOAA Technical Memorandum NMFS-NWFSC-59: Extraction, Cleanup and GC/MS Analysis of Sediments and Tissues for Organic Contaminants, March 2004 and the Determination of Pesticides and PCBs in Water and Oil/Sediment by GC/MS: Method 680, EPA 01A0005295, November 1985.

### **LIMITATION OF LIABILITIES**

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## **Certificate/Approval Program Summary**

Last revised August 3, 2012 - Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

## Connecticut Department of Public Health Certificate/Lab ID: PH-0141.

Wastewater/Non-Potable Water (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable).

Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

Solid Waste/Soil (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### Florida Department of Health Certificate/Lab ID: E87814. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

Solid & Chemical Materials (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

Air & Emissions (EPA TO-15.)

#### Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

Biological Tissue (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

Air & Emissions (EPA TO-15.)

### New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. NELAP Accredited.

*Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . <u>Organic Parameters</u>: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

### New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. NELAP Accredited.

*Non-Potable Water* (<u>Inorganic Parameters</u>: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. <u>Organic Parameters</u>: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

Solid & Chemical Materials (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

Atmospheric Organic Parameters (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

Biological Tissue (Inorganic Parameters: SW-846 6020A. <u>Organic Parameters</u>: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

## New York Department of Health Certificate/Lab ID: 11627. NELAP Accredited.

Non-Potable Water (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

Air & Emissions (EPA TO-15, TO-10A.)

## Pennsylvania Certificate/Lab ID: 68-02089 NELAP Accredited

Non-Potable Water (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

## Rhode Island Department of Health Certificate/Lab ID: LAO00299. NELAP Accredited via NJ-DEP.

Refer to NJ-DEP Certificate for Non-Potable Water.

## Texas Commission of Environmental Quality Certificate/Lab ID: T104704419-08-TX. NELAP Accredited.

Solid & Chemical Materials (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

Air (Organic Parameters: EPA TO-15)

#### Virginia Division of Consolidated Laboratory Services Certificate/Lab ID:460194. NELAP Accredited.

*Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 3020A, 6020A, 245.7, 9040B. <u>Organic Parameters</u>: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

Solid & Chemical Materials (Inorganic Parameters: EPA 6020A,7470A,7471B,9040B,9045C,3050B,3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

**Washington State Department of Ecology** <u>Certificate/Lab ID</u>: C954. *Non-Potable Water* (<u>Inorganic</u> Parameters: SM2540D, 180.1, 1631E.)

*Solid & Chemical Materials* (<u>Inorganic Parameters</u>: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. <u>Organic Parameters</u>: EPA 8081, 8082, 8015, 8270.)

#### **U.S. Army Corps of Engineers**

## Department of Defense, L-A-B Certificate/Lab ID: L2217.01.

Non-Potable Water (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270C, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.

Air & Emissions (EPA TO-15.)

## **Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **8270C:** Biphenyl. **TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

## **CHAIN OF CUSTODY FORM**

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Environmental
Health &
Engineering, Inc

FROM: Environmental Health and Engineering, Inc.

117 Fourth Avenue

Needham, MA 02494-2725

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For EH & E Da	ata Coordinator - U	RGENT DATA	
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146137		1/	1308.0
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		Its 781-247-4305 date/fime	
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Each signa	tory please ret	urn one copy of this form to the above addre	SS
Relinquished b	Dy: / /	of Environmental Health & Engineering, Inc.	Date: 8/1/13
Received by:	David Box	of (company name) Alpha Analytica	
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